



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.        | CONFIRMATION NO.       |
|--|-------------|----------------------|----------------------------|------------------------|
| 10/780,877   | 02/19/2004  | Peter Kochersperger  | 1857.2140000               | 1990                   |
| 26111 7590 11/02/2007<br>STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.<br>1100 NEW YORK AVENUE, N.W.<br>WASHINGTON, DC 20005 |             |                      | EXAMINER<br>DUONG, KHANH B |                        |
|  |             |                      | ART UNIT<br>2822           | PAPER NUMBER           |
|  |             |                      | MAIL DATE<br>11/02/2007    | DELIVERY MODE<br>PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/780,877

Applicant(s)

KOCHERSPERGER, PETER

Examiner

Khanh B. Duong

Art Unit

2822

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 12-23 is/are pending in the application.
- 4a) Of the above claim(s) 15-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12-14 and 23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

This office action is in response to the amendment filed August 20, 2007.

Accordingly, claim 12 was amended.

Claims 1-11 were previously canceled.

Claims 15-22 remain withdrawn from further consideration as being directed to a non-elected invention.

Currently, claims 12-14 and 23 remain active.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claim 12 is rejected under 35 U.S.C. 102(b) as being anticipated by  
Oglesbee (U.S. Patent No. 4,744,550).**

Re claim 12, Oglesbee discloses in figs. 1-2 a wafer holder 10 comprising: a wafer chuck 5 configured to receive a wafer 7; and an expander 3 coupled to the wafer chuck 5 and configured to expand the wafer chuck 5 without substantially expanding the wafer, such that an inherent initial stress at an interface between the wafer 7 and the wafer chuck 5 is created [see col. 2, lines 57-64]. Oglesbee further discloses in fig. 6 the wafer chuck 5 and the wafer are being simultaneously expanded by a vacuum in groove 25, wherein gaps 33 are formed between separated semiconductor devices 7

Art Unit: 2822

[see col. 3, lines 42-56]. However, Oglesbee expressly shows in figs. 5 and 6 that at the very early stage of the simultaneous expanding process, the flexible wafer chuck 5 is the first to be expanded due to its flexibility while the rigid wafer 7 is not being substantially expanded. At this stage, it can be understood that an initial stress must exist at an interface between the wafer 7 and the wafer chuck 5 before the wafer 7 starts to substantially expand and separate into individual semiconductor devices 7.

Furthermore, the recitation “[a] lithography system configured to reduce wafer slipping” has not been given patentable weight because it has been held that a preamble is denied the effect of a limitation where the claim following the preamble is a self-contained description of the structure not depending for completeness upon the introductory clause. *Kropa v. Robie*, 88USPQ 478 (CCPA 1951).

**Claims 12-14 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Getchel et al. (U.S. Patent No. 6,375,176).**

Re claim 12, Getchel et al. (“Getchel”) expressly discloses in FIGs. 9A and 11A wafer holder comprising: a wafer chuck 500 configured to receive a wafer; and an expander 532 coupled to the wafer chuck 500 to expand the wafer chuck 500 (by heating) and create an inherent initial stress (by heating) at an interface between the wafer and the wafer chuck 500.

Furthermore, the recitation “[a] lithography system configured to reduce wafer slipping” has not been given patentable weight because it has been held that a preamble is denied the effect of a limitation where the claim following the preamble is a

self-contained description of the structure not depending for completeness upon the introductory clause. *Kropa v. Robie*, 88USPQ 478 (CCPA 1951).

Re claim 13, Getchel expressly discloses in the same figures the expander 532 comprises an annular tube 580 coupled to said wafer chuck 500.

Re claim 14, Getchel expressly discloses in the same figures said annular tube 580 is coupled to an outer edge of said wafer chuck 500.

Re claim 23, Getchel discloses said expander 532 is configured to expand (by heating) said wafer chuck 500 in an inherently uniform manner [see col. 15, lines 13-18 and col. 16, lines 10-12].

### ***Response to Arguments***

Applicant's arguments with respect to the amended claims have been considered and incorporated in the ground(s) of rejection above.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

Art Unit: 2822

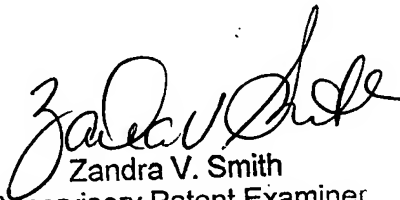
extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh B. Duong whose telephone number is (571) 272-1836. The examiner can normally be reached on Monday to Friday from 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zandra Smith, can be reached on (571) 272-2429. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
KBD

  
Zandra V. Smith  
Supervisory Patent Examiner  
29 Oct. 2007